

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (Currently Amended) A handheld pipette including:
a body portion having a vertical central axis longer than a horizontal central axis and shaped to fit in an operator's hand;

a nozzle portion extending from a point on said body portion and at a downward angle θ of approximately 60° to 80° to the vertical central axis of said body portion, wherein the nozzle portion is configured such that a pipette tip can be mounted to an end of the nozzle portion in fluid communication with the nozzle portion; and

at least one button located on the top of the body portion and operable by a thumb of the operator to effect aspiration of liquid into the pipette tip mounted to the end of the nozzle portion and dispensing of the liquid from the pipette tip mounted to the end of the nozzle portion, the at least one button being aligned with or substantially aligned with the vertical central axis of the body portion; and

a piston member operable for ~~preventing~~ controlling flow of the liquid aspirated into the pipette tip such that the

liquid ~~from cannot entering enter~~ into the nozzle portion and
thereby cannot move through the body portion.

Claim 2 (Currently Amended) A The handheld pipette as
claimed in claim 1 where said angle θ is approximately 70° to
said vertical central axis.

Claim 3 (Currently Amended) A The handheld pipette as
claimed in claim 1 wherein said ~~nozzle~~-angle θ is adjustable.

Claim 4 (Currently Amended) A The handheld pipette as
claimed in claim 1 wherein said ~~nozzle~~-angle θ is such as to
permit at least one of the operator's wrist, elbow and shoulder
to be in a substantially ~~neutral~~-natural position when the
pipette is performing a pipetting operation.

Claim 5 (Currently Amended) A The handheld pipette as
claimed in claim 1 ~~wherein said nozzle is designed to have a~~
~~tip mounted to the end thereof, and~~ wherein said angle θ ~~for~~
~~the nozzle~~ is such that any tip mounting force is in a
direction causing a major component of the force to be applied
against and substantially perpendicular to a portion of the
operator's hand grasping said body portion which is

substantially between a second joint of the operator's fingers and a point slightly behind the operator's knuckles.

Claim 6 (Currently Amended) A The handheld pipette as claimed in claim 1 including a hook extending from a point on said body portion which is sufficiently angularly spaced from the point from which said nozzle portion extends to permit the hook to fit over a selected portion of the operator's hand when the pipette is being held by the operator in a position of use.

Claim 7 (Currently Amended) A The handheld pipette as claimed in claim 6 wherein said hook is adjustable to change at least one of the angle by which the hook is spaced from the nozzle portion, the height on the body portion for the point from which the hook extends and the angle of the hook relative to said vertical central axis.

Claim 8 (Currently Amended) A The handheld pipette as claimed in claim 6 wherein said hook is removably mounted to said body portion, said hook being replaceable with a hook of different size/shape to accommodate at least one of user preference and different hand sizes.

Claims 9-11 (Previously Canceled).

Claim 12 (Currently Amended) A The handheld pipette as claimed in claim 1 wherein said at least one button is operated in a direction at a selected angle to said nozzle portion.

Claim 13 (Currently Amended) A The handheld pipette as claimed in claim 1 wherein said at least one button is shaped to minimize contact pressure on the operator's hand when the at least one button is operated.

Claim 14 (Currently Amended) A The handheld pipette as claimed in claim 1 including a button on said body which controls ejection of a tip from said nozzle portion, said button being shaped to minimize contact pressure on the operator's hand when the button is operated.

Claim 15 (Currently Amended) A The handheld pipette as claimed in claim 1 wherein ~~the~~ a position of the nozzle portion and the angle θ ~~of the nozzle~~ are such that an end of the nozzle portion adjacent said body portion is closely adjacent the index finger of the operator when properly held.

Claim 16 (Currently Amended) A The handheld pipette as claimed in claim 1 wherein said body portion has a stable base permitting said pipette to stand ~~upright~~ on a surface with the vertical central axis of the body portion substantially perpendicular to the surface.

Claim 17 (Currently Amended) A The handheld pipette as claimed in claim ~~78~~ 1 wherein said nozzle portion is operable for receiving the pipette tip ~~and pipette parameters~~, including at least the angle θ of said nozzle portion to ~~an~~ the vertical central axis of said body portion and length of said tip affixed to said nozzle portion, are selected such that said tip does not touch ~~said a surface on which the pipette is standing.~~

Claim 18 (Currently Amended) A The handheld pipette as claimed in claim 1 wherein said body portion has a bottom which is removable at least in part to provide access to the pipette.

Claim 19 (Currently Amended) A The handheld pipette as claimed in claim 1 including an adapter selectively mountable to said body portion, said adapter adjusting the size of said body portion to better fit operator hand size.

Claim 20 (Currently Amended) A The handheld pipette as claimed in claim 1 including padding on at least a portion of said body portion.

Claim 21 (Currently Amended) A The handheld pipette as claimed in claim 1 wherein portions of said pipette which come in contact with the operator's hand are shaped to minimize contact pressure for the operator's hand during operation of the pipette.

Claim 22 (Currently Amended) A The handheld pipette as claimed in claim 21 wherein the portions of said pipette which come in contact with the operator's hand are shaped so that the contact pressure at no point on said pipette exceeds 14 psi.

Claim 23 (Currently Amended) A The handheld pipette as claimed in claim 1 wherein said nozzle portion extends from a point on an upper section of said body portion.

Claim 24 (Currently Amended) A The handheld pipette as claimed in claim 1 wherein said body portion is shaped and said nozzle portion is ~~position~~positioned such that when the pipette is held in an operating position, the nozzle portion is

at an angle substantially perpendicular to the operator's forearm.

Claim 25-80 (Canceled)

Claim 81 (Currently Amended) A handheld pipette, comprising:

a body portion having a vertical central axis longer than a horizontal central axis and being shaped to fit in an operator's hand, the body portion including a stable base permitting the pipette to stand ~~upright~~ on a surface with the vertical central axis of the body portion substantially perpendicular to the surface;

a nozzle portion extending from a point on an upper section of the body portion and at a downward angle θ within a range of approximately 60° to 80° with respect to the vertical central axis, wherein the nozzle portion is configured such that a pipette tip can be mounted to an end of the nozzle portion in fluid communication with the nozzle portion;

~~a tip removably mounted to the nozzle portion, the tip operable for receiving liquid;~~

a button located on a top of the body portion and operable by a thumb of the operator to effect aspiration of liquid into

the pipette tip mounted to the end of the nozzle portion and dispensing of the liquid through from the pipette tip mounted to the end of the nozzle portion and to effect aspiration and dispensing of air through the nozzle portion, the button being aligned with or substantially aligned with the vertical central axis;

a piston member operable for ~~preventing~~controlling flow of the liquid aspirated into the pipette tip such that the liquid from entering cannot enter into the nozzle portion and thereby cannot move through the body portion; and

a hook mounted to the body portion and extending from a point at an end or at substantially the end of the upper section of the body portion, the hook being angularly spaced by an angle Φ from the point from which the nozzle portion extends, wherein

at least the angle θ of the nozzle portion and a length of the tip are selected such that the tip when mounted to the nozzle portion does not touch ~~the~~a surface when the pipette is placed ~~upright~~on the surface with the vertical central axis of the body portion substantially perpendicular to the surface.

Claim 82 (Currently amended) The handheld pipette as claimed in claim 81, wherein

the ~~nozzle~~-angle θ is adjustable.

Claim 83 (Previously presented) The handheld pipette as claimed in claim 81, wherein

the hook is adjustable to change at least one of the angle ϕ , a height on the body portion for the point from which the hook extends, and an angle of the hook relative to the vertical central axis.